## CLAIMS

What is claimed is:

1.      A method for processing a drawing command on a host computer in a computer system

having a host computer and a display computer, the method comprising:

        determining if the drawing command draws text to the screen; and

        instructing the display computer to perform an equivalent action to the drawing command

using a cache of one or more sets of one or more character images if the drawing command

draws text to the screen.


2.      The method of claim 1, further comprising:

        managing said cache of one or more sets of one or more character images from the host

computer.


3.      The method of claim 2, wherein said managing includes:

        maintaining a list of sets of character images currently cached on the display computer;

and

        updating said list as needed in response to said drawing command.


4.      A method for reducing the storage or bandwidth requirements of a graphics image or

reducing CPU usage in a computer system, the method comprising:

        recording a text command executed to create a portion of the graphics image;

        using said text command to update a data structure with information; and

compressing one or more sub-images of the graphics image using a compression scheme, each of said sub-images having a location, said location and said compression scheme for each of said sub-images chosen based on said information in said data structure.

5.      The method of claim 4, wherein said data structure identifies the portion of the graphics image that was created with a specific drawing command.

6.      The method of claim 5, wherein said data structure includes a list specifying text regions, text strings, character set identifiers, and/or colors.

7.      The method of claim 6, further comprising:

determining if a set of character images compatible with a set of character images utilized in the text command already exists in a cache;

adding the set of character images utilized in the text command to the display computer cache if the set of character images utilized in the text command does not already exist in a cache; and

utilizing said set of character images to display said one or more sub-images of the graphics image created using the text command.

8.      The method of claim 7, wherein said adding the set of character images utilized in the text command includes:

determining if there is enough room in said cache on said display computer for the set of character images;

removing cache entries until there is enough room in said cache, if there is not enough

room in said cache on said display computer for the set of character images;

sending a request to said display computer to create one or more new cache entries for the

set of character images; and

adding the set of character images to said list of sets of character images currently cached

on said display computer.

9.      The method of claim 8, where said removing cache entries includes taking into account

the last time the cache entry was used.

10.     The method of claim 8, wherein said removing cache entries includes:

removing one or more cache entries from the list of cache entries on the host computer;

and

sending one or more requests to said display computer to remove said cache entries.

11.     A method for reducing the storage or bandwidth requirements of a graphics image or

reducing CPU usage in a computer system, the method comprising:

detecting a text command executed to create a portion of the graphics image;

computing a drawn-to region from said text command; and

adding an entry specifying the text string, character set identifier, color, and text region to

a linked list of text entries.

12.     The method of claim 11, further comprising:

transmitting one or more messages instructing the display computer to draw the image

using the character image cache entries.

13.    The method of claim 12, further comprising:

determining if a set of character images compatible with a set of character images utilized

in the text command already exists in the cache; and

adding the set of character images utilized in the text command to the display computer

cache if a set of character images compatible with a set of character images utilized in the text

command does not already exist in the cache; and

utilizing said set of character images to display said one or more sub-images of the

graphics images created using the text command.

14.    The method of claim 13, wherein said adding the set of character images utilized in the

text command includes:

determining if there is enough room in said cache on said display computer for the set of

character images;

removing cache entries until there is enough room in said cache, if there is not enough

room in said cache on display computer for the set of character images;

sending a request to said display computer to create one or more new cache entries for the

set of character images; and

adding the set of character images to said list of sets of character images currently cached

on said display computer.

15.    The method of claim 14, where said removing cache entries includes taking into account the last time the cache entry was used.

16.    The method of claim 14, wherein said removing cache entries includes:

removing one or more cache entries from the list of cache entries on the host computer; and

sending one or more requests to said display computer to remove said cache entries.

17.    The method of claim 10, further comprising subtracting said drawn-to region from one or more existing fill, miscellaneous, or RGB regions.

18.    An apparatus for processing a drawing command on a host computer in a computer system having a host computer and a display computer, the apparatus comprising:

a text drawing command determiner; and

a display computer equivalent action perform instructor coupled to said text drawing command determiner.

19.    The apparatus of claim 18, further comprising:

a set of character images cache manager coupled to said display computer equivalent action perform instructor.

20.    The apparatus of claim 19, wherein said set of character images cache manager includes:

a display computer set of character images cache list maintainer; and

a display computer set of character images cache list updater coupled to said display

computer set of character images cache list maintainer.

21.    An apparatus for reducing the storage or bandwidth requirements of a graphics image or

reducing CPU usage in a computer system, comprising:

a text command recorder;

a data structure updater coupled to said text command recorder; and

an image compressor coupled to said data structure updater.

22.    The apparatus of claim 21, further comprising:

a display computer cache compatible set of character images determiner coupled to said

text command recorder;

a display computer cache set of character images adder coupled to said display computer

cache compatible set of character images determiner; and

a display computer set of character images displayer coupled to said display computer

cache set of character images adder.

23.    The apparatus of claim 22, wherein said display computer cache set of character images

adder includes:

a display computer cache room determiner;

a cache entry remover and cache entry remover request sender coupled to said display

computer cache room determiner;

a new cache entry display computer request sender coupled to said display computer cache room determiner; and

a display computer cache set of character images list adder coupled to said new cache entry display computer request sender.

24.    An apparatus for reducing the storage or bandwidth requirements of a graphics image or reducing CPU usage in a computer system, the method comprising:

a text command detector;

a drawn-to region computer coupled to said text command detector; and

a text string, character set identifier, color, and region linked list entry adder coupled to said drawn-to region computer.

25.    The apparatus of claim 24, further comprising a text region transmitter coupled to said text string, character set identifier, color, and region linked list entry adder.

26.    The apparatus of claim 24, further comprising:

a display computer cache compatible set of character images determiner coupled to said text command detector;

a display computer cache set of character images adder coupled to said display computer cache compatible set of character images determiner; and

a display computer set of character images displayer coupled to said display computer cache set of character images adder.

27.    The apparatus of claim 26, wherein said display computer cache set of character images

adder includes:

a display computer cache room determiner;

a cache entry remover and cache entry remover request sender coupled to said display

computer cache room determiner;

a new cache entry display computer request sender coupled to said display computer

cache room determiner; and

a display computer cache set of character images list adder coupled to said new cache

entry display computer request sender.

28.    The apparatus of claim 24, further comprising a drawn-to region to fill, miscellaneous,

and RGB region remover coupled to said text command detector.

29.    An apparatus for processing a drawing command on a host computer in a computer

system having a host computer and a display computer, the apparatus comprising:

means for determining if the drawing command draws text to the screen; and

means for instructing the display computer to perform an equivalent action to the drawing

command using a cache of one or more sets of one or more character images if the drawing

command draws text to the screen.

30.    The apparatus of claim 29, further comprising:

means for managing said cache of one or more sets of one or more character images from

the host computer.

31.     The apparatus of claim 30, wherein said means for managing includes:

means for maintaining a list of sets of character images currently cached on the display computer; and

means for updating said list as needed in response to said drawing command.


32.     An apparatus for reducing the storage or bandwidth requirements of a graphics image or reducing CPU usage in a computer system, the apparatus comprising:

means for recording a text command executed to create a portion of the graphics image;

means for using said text command to update a data structure with information; and

means for compressing one or more sub-images of the graphics image using a compression scheme, each of said sub-images having a location, said location and said compression scheme for each of said sub-images chosen based on said information in said data structure.


33.     The apparatus of claim 32, wherein said data structure identifies the portion of the graphics image that was created with a specific drawing command.


34.     The apparatus of claim 33, wherein said data structure includes a list specifying text regions, text strings, character set identifiers, and /or colors.


35.     The apparatus of claim 34, further comprising:

means for determining if a set of character images compatible with a set of character images utilized in the text command already exists in a cache;

means for adding the set of character images utilized in the text command to the display computer cache if the set of character images utilized in the text command does not already exist in a cache; and

means for utilizing said set of character images to display said one or more sub-images of the graphics image created using the text command.


36.    The apparatus of claim 35, wherein said means for adding the set of character images utilized in the text command includes:

means for determining if there is enough room in said cache on said display computer for the set of character images;

means for removing cache entries until there is enough room in said cache and sending one or more requests to said display computer to remove said cache entries, if there is not enough room in said cache on display computer for the set of character images;

means for sending a request to said display computer to create a new cache entry for the set of character images; and

means for adding the set of character images to said list of sets of character images currently cached on said display computer.


37.    The apparatus of claim 36, where said means for removing cache entries includes means for taking into account the last time the cache entry was used.

38.    An apparatus for reducing the storage or bandwidth requirements of a graphics image or

reducing CPU usage in a computer system, the apparatus comprising:

    means for detecting a text command executed to create a portion of the graphics image;

    means for computing a drawn-to region from said text command; and

    means for adding an entry specifying the text string, character set identifier, color, and

text region to a linked list of text regions.


39.    The apparatus of claim 38, further comprising:

    means for transmitting one or more messages instructing the display computer to draw

the image using the character image cache entries.


40.    The apparatus of claim 39, further comprising:

    means for determining if a set of character images compatible with a set of character

images utilized in the text command already exists in the cache; and

    means for adding the set of character images utilized in the text command to the display

computer cache if a set of character images compatible with a set of character images utilized in

the text command does not already exist in the cache; and

    means for utilizing said set of character images to display said one or more sub-images of

the graphics images created using the text command.


41.    The apparatus of claim 40, wherein said means for adding the set of character images

utilized in the text command includes:

means for determining if there is enough room in said cache on said display computer for the set of character images;

means for removing cache entries until there is enough room in said cache, if there is not enough room in said cache on said display computer for the set of character images;

means for sending a request to said display computer to create one or more new cache entries for the set of character images; and

means for adding the set of character images to said list of sets of character images currently cached on said display computer.

42.     The apparatus of claim 41, where said means for removing cache entries includes means for taking into account the last time the cache entry was used.

43.     The apparatus of claim 38, further comprising means for subtracting said drawn-to region from one or more existing fill, miscellaneous, or RGB regions.

44.     A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform a method for processing a drawing command on a host computer in a computer system having a host computer and a display computer, the method comprising:

determining if the drawing command draws text to the screen; and

instructing the display computer to perform an equivalent action to the drawing command using a cache of one or more sets of one or more character images if the drawing command draws text to the screen.

45.    A program storage device readable by a machine, tangibly embodying a program of

instructions executable by the machine to perform a method for reducing the storage or

bandwidth requirements of a graphics image and reducing CPU usage in a computer system, the

method comprising:

    recording a text command executed to create a portion of the graphics image;

    using said text command to update a data structure with information; and

    compressing one or more sub-images of the graphics image using a compression scheme,

each of said sub-images having a location, said location and said compression scheme for each of

said sub-images chosen based on said information in said data structure.


46.    A program storage device readable by a machine, tangibly embodying a program of

instructions executable by the machine to perform a method for reducing the storage or

bandwidth requirements of a graphics image or reducing CPU usage in a computer system, the

method comprising:

    detecting a text command executed to create a portion of the graphics image;

    computing a drawn-to region from said text command; and

    adding an entry specifying the text string, character set identifier, color, and text region to

a linked list of text entries.